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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,248	06/04/2001	Yoshiya Isono	113197-004	8139

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EXAMINER
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PRITCHETT, JOSHUA L

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/786,248	<b>Applicant(s)</b> ISONO ET AL.	
	<b>Examiner</b> Joshua L Pritchett	<b>Art Unit</b> 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 19-50 is/are pending in the application.
- 4a) Of the above claim(s) 19-24 and 26-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25 and 39-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

This action is in response to Request for Continued Examination filed October 21, 2004 and Amendment filed October 21, 2004. Claim 25 has been amended and claims 39-50 have been added as requested by the applicant.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (US 6,118,915).

Sato teaches an optical module comprising optical fibers (8) protruding portion and tips (Fig. 1); a light emitting element (8a); a light receiving element (core of optical fiber 8 on side opposite 8a); two mounts (10 on both sides) on which are mounted the light emitting and light receiving elements (Fig. 1); a package (9) comprising a positioning structure comprising walls (Fig. 1); the optical fibers protrude to the inside of the package (Fig. 1); the walls of the positioning structure directly contact the side faces of the mounts (Fig. 1); wherein each of the

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tips of the optical fibers being arranged so as to oppose one of the light emitting face of the optical elements and a light receiving face of the optical elements (Fig. 1); the positioning structure positions the mounts at predetermined positions so that the light emitting face or the light receiving face opposed at least one of the tips of the optical fibers (Fig. 1); and the positions of the two mounts differ in the longitudinal direction of the optical fibers (Fig. 1). Sato lacks the claimed optical connector. The prior art shown in Sato teaches an optical connector section (Fig. 6) for connecting to an outside optical connector, the optical connector section having inserted there into and securing the optical fibers (Fig. 6). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Sato invention include the optical connector as shown in the prior art of Sato for the purpose of securely maintaining the position of the optical fibers.

Claims 39-44, 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Mori (EP 0 895 112 A1).

Regarding claims 39-44, Sato teaches the invention as claimed but lacks reference to the claimed structure of the package. Mori teaches the positioning structure comprises protrusion for positioning which protrude inwardly from inner wall of the package (7g). Mori further teaches the positioning structure comprises a side face of the positioning stand provided so as to touch the side face of the mounts which the optical elements are mounted on and thereby position the mount (Fig. 6). Fig. 6 shows the positioning structure (7) contacting the mounting surface (2). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Sato invention include the package structure as taught by Mori for the purpose

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of containing the light emitting and receiving faces inside a housing to prevent stray light from interfering with the optical data transfer.

Regarding claims 48 and 49, Sato teaches the invention as claimed but lacks reference to the claimed structure of the package. Mori teaches at least one wall does not protrude inwardly in the package (Figs. 3 and 6). Mori further teaches a wall comprises an inner wall of the package (Figs. 3 and 6). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Sato invention include the package structure as taught by Mori for the purpose of containing the light emitting and receiving faces inside a housing to prevent stray light from interfering with the optical data transfer.

Claims 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Laughlin (US 6,236,787).

Sato teaches the invention as claimed including the a first wall positioned so at least one mount is in the direction of the longitudinal axis of the optical fiber (Fig. 1) but lacks reference to the mount being off axis of the optical fiber. Laughlin teaches a second wall formed so as to position at least one mount in a direction at generally a right angle to the longitudinal axis of the optical fiber (Fig. 9A). Laughlin shows the mount (46h), in the broadest reasonable interpretation of generally a right angle, is at generally a right angle to the longitudinal axis of optical fiber (52i). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Sato invention include the mounting structure as taught in Laughlin for the purpose of changing the direction of the light in the optical module.

### ***Response to Arguments***

Applicant's arguments filed October 21, 2004 have been fully considered but they are not persuasive.

On page 10, applicant argues that Sato fails to teach the claimed optical connector. After reexamining the claim in light of the specification the citation for the teaching of the optical connector has been changed to the Sato prior art Fig. 6. The prior art figure shows a connector used to secure optical fibers (53a-b) connected to an outside connector in as much as the current application shows in Fig. 36 the optical connector (8) connecting to an outside connector.

On page 10, applicant argues that Sato fails to teach the mounts being positioned by the positioning structure. The claim language states the package accommodates the mounts. The grooves (10) of Sato are accommodated by the package (9) of Sato and therefore meet the claim limitations as written in the claim.

On page 10, applicant argues that Sato lacks the walls of the positioning structure in direct contact with the side faces of the mounts. The walls of package (9) contact the empty groove space of the mounts (10).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L Pritchett whose telephone number is 571-272-2318. The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JLP *JP*



**DREW A. DUNN**  
SUPERVISORY PATENT EXAMINER